

SOME NEW β -PHENETHYLAMINES

β -PHENETHYLAMINE and its derivatives are well known for their sympathomimetic action which is modified by the presence of substituent groups. With a view to studying the effect of the latter in different positions in the aromatic ring on the physiological activity, a number of β -phenethylamines have been synthesised. The starting materials were the following aldehydes: (1) 2, 4-dimethoxy-6-methylbenzaldehyde, (2) 2, 4-diethoxy-6-methylbenzaldehyde, (3) 2-ethoxy-4-methoxy-6-methylbenzaldehyde, (4) 2, 6-dimethyl-4-methoxybenzaldehyde, (5) 2, 6-dimethyl-4-ethoxybenzaldehyde, (6) 2, 4-dimethyl-6-methoxybenzaldehyde, (7) 2, 4-dimethyl-6-ethoxybenzaldehyde, (8) 2-benzyloxy-3-methoxybenzaldehyde, (9) 2, 3,

| No. | m.p. of nitro-styrene | Formula | ANALYSIS | | | | m.p. of amine picrate | Formula | ANALYSIS | | | |
|-----|-----------------------|--|----------|-----|------------|-----|-----------------------|--|----------|-----|------------|-----|
| | | | Found | | Calculated | | | | Found | | Calculated | |
| | | | C% | H% | C% | H% | | | C% | H% | C% | H% |
| 1 | 117°-18° | C ₁₁ H ₁₃ O ₄ N | 59.1 | 5.6 | 59.2 | 5.8 | 219°-21° (d) | C ₁₇ H ₂₀ O ₉ N ₄ | 48.0 | 5.0 | 48.1 | 4.7 |
| 2 | 115°-17° | C ₁₃ H ₁₇ O ₄ N | 62.4 | 6.7 | 62.2 | 6.7 | 178°-80° | C ₁₉ H ₂₄ O ₉ N ₄ | 50.1 | 5.4 | 50.4 | 5.3 |
| 3 | 135°-36° | C ₁₂ H ₁₅ O ₄ N | 61.1 | 6.2 | 60.8 | 6.3 | 188°-89° | C ₁₈ H ₂₂ O ₉ N ₄ | 49.6 | 5.3 | 49.3 | 5.0 |
| 4 | 115°-16° | C ₁₁ H ₁₃ O ₃ N | 63.8 | 6.2 | 63.8 | 6.3 | 215°-16° (d) | C ₁₇ H ₂₀ O ₈ N ₄ | 50.3 | 5.2 | 50.0 | 4.9 |
| 5 | 81°-82° | C ₁₂ H ₁₅ O ₃ N | 65.4 | 7.1 | 65.2 | 6.8 | 185°-86° | C ₁₈ H ₂₂ O ₈ N ₄ | 51.2 | 5.2 | 51.2 | 5.2 |
| 6 | 140°-41° | C ₁₁ H ₁₃ O ₃ N | 64.0 | 6.1 | 63.8 | 6.3 | 188°-89° | C ₁₇ H ₂₀ O ₈ N ₄ | 50.3 | 5.1 | 50.0 | 5.0 |
| 7 | 113°-14° | C ₁₂ H ₁₅ O ₃ N | 64.9 | 6.5 | 65.2 | 6.8 | 173°-74° | C ₁₈ H ₂₂ O ₈ N ₄ | 51.0 | 5.6 | 51.2 | 5.2 |
| 8 | Oil | C ₁₆ H ₁₅ O ₄ N | .. | .. | .. | .. | 143°-45° | C ₂₂ H ₂₂ O ₉ N ₄ | 54.3 | 5.1 | 54.3 | 4.5 |
| 9 | 102°-03° | C ₁₁ H ₁₃ O ₅ N | 55.1 | 5.6 | 55.2 | 5.4 | 158°-59° | C ₁₇ H ₂₀ O ₁₀ N ₄ | 46.1 | 4.7 | 46.4 | 4.5 |

5-trimethoxybenzaldehyde. These were condensed with nitromethane¹ in the presence of acetic acid and ammonium acetate to give the corresponding β -nitrostyrenes. The latter were reduced with lithium aluminium hydride² to the β -phenethylamines isolated as their picrates.

These amines are being tested for their physiological activity, and a detailed account will be published elsewhere.

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June 4, 1957.

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2. Ramirez, F. and Burger, A. *J. Am. Chem. Soc.*, 1950, **72**, 2781; Erne, M. and Ramirez, F., *Helv. Chim. Acta*, 1950, **33**, 912.